AMENDMENTS TO THE CLAIMS

1. (currently amended): A process for improving the thermal stability of polymers comprising blending, before melt processing, (1) a polymer selected from the group consisting of (a) ~~olefin polymers, (b)~~ polymers of vinyl-substituted aromatic compounds, (b) ~~(c)~~ polymers of acrylic esters selected from the group consisting of (i) an ester of an acrylic acid substituted at the alpha-carbon atom by a 1-3 C alkyl group, and (ii) a combination of (i) and at least one monomer capable of being polymerized by free radicals, and (c) ~~(d)~~ graft copolymers comprising a backbone of a propylene polymer material having graft polymerized thereto a monomer selected from the group consisting of (i) an ester of an acrylic acid substituted at the alpha-carbon atom by a 1-3 C alkyl group, and (ii) a combination of (i) and at least one monomer capable of being polymerized by free radicals, and (2) about 0.1% to about 5%, based on the weight of the polymer, of at least one aliphatic compound having at least one site of unsaturation, the compound having a molecular weight of at least 200 and an iodine number of at least 10.

2. (canceled)

3. (original): The process of claim 1 wherein the vinyl-substituted aromatic compound is selected from the group consisting of (a) styrene, (b) alpha-methylstyrene, and (c) ring-substituted styrenes.

4. (original): The process of claim 1 wherein the polymer of an acrylic ester is poly(methyl methacrylate).

5. (original): The process of claim 1 wherein the propylene polymer material backbone of the graft copolymer is selected from the group consisting of:

(a) a crystalline homopolymer of propylene having an isotactic index greater than 80;

(b) a crystalline copolymer of propylene and an olefin selected from the group consisting of ethylene and 4-10 C alpha-olefins, provided that when the olefin is ethylene, the maximum polymerized ethylene content is 10% by weight, and when the olefin is a 4-10 C alpha-olefin, the maximum polymerized content thereof is 20%, the copolymer having an isotactic index greater than 85;

(c) a crystalline terpolymer of propylene and two olefins selected from the group consisting of ethylene and 4-8 C alpha-olefins, provided that the maximum polymerized 4-8 C alpha-olefin content is 20% by weight, and, when ethylene is one of the olefins, the maximum

polymerized ethylene content is 5% by weight, the terpolymer having an isotactic index greater than 85;

(d) an olefin polymer composition comprising:

(i) about 10% to about 60% by weight of a crystalline propylene homopolymer having an isotactic index greater than 80, or a crystalline copolymer of monomers selected from the group consisting of (a) propylene and ethylene, (b) propylene, ethylene and a 4-8 C alpha-olefin, and (c) propylene and a 4-8 C alpha-olefin, the copolymer having a polymerized propylene content of more than 85% by weight, and an isotactic index greater than 85;

(ii) about 5% to about 25% of a copolymer of ethylene and propylene or a 4-8 C alpha-olefin that is insoluble in xylene at ambient temperature, and

(iii) about 30% to about 70% of an elastomeric copolymer of monomers selected from the group consisting of (a) ethylene and propylene, (b) ethylene, propylene, and a 4-8 C alpha-olefin, and (c) ethylene and a 4-8 C alpha-olefin, the copolymer optionally containing about 0.5% to about 10% of a diene, and containing less than 70% by weight of polymerized ethylene and being soluble in xylene at ambient temperature, and having an intrinsic viscosity of about 1.5 to about 4.0 dl/g,

wherein the total amount of (ii) and (iii), based on the total olefin polymer composition, is about 50% to about 90%, the weight ratio of (ii)/(iii) is less than 0.4, and the composition is prepared by polymerization in at least two stages, and has a flexural modulus of less than 150 MPa; and

(e) a thermoplastic olefin comprising:

(i) about 10% to about 60% of a crystalline propylene homopolymer having an isotactic index greater than 80, or a crystalline copolymer of monomers selected from the group consisting of (a) ethylene and propylene, (b) ethylene, propylene, and a 4-8 C alpha-olefin, and (c) ethylene and a 4-8 C alpha-olefin, the copolymer having a polymerized propylene content greater than 85% and an isotactic index of greater than 85;

(ii) about 20% to about 60% of an amorphous copolymer of monomers selected from the group consisting of (a) ethylene and propylene, (b) ethylene, propylene, and a 4-8 C alpha-olefin, and (c) ethylene and a 4-8 C alpha-olefin, the copolymer optionally containing about 0.5% to about

10% of a diene and containing less than 70% polymerized ethylene and being soluble in xylene at ambient temperature; and

(iii) about 3% to about 40% of a copolymer of ethylene and propylene or a 4-8 C alpha-olefin that is insoluble in xylene at ambient temperature,

wherein the composition has a flexural modulus of greater than 150 but less than 1200 MPa.

6. (original): The process of claim 5 wherein the propylene polymer material is a propylene homopolymer.

7. (original): The process of claim 1 wherein the monomers graft polymerized to the backbone of propylene polymer material are methyl methacrylate and methyl acrylate.

8. (original): The process of claim 1 wherein the monomers graft polymerized to the backbone of propylene polymer material are methyl methacrylate and methacrylic acid.

9. (original): The process of claim 1 wherein the monomers graft polymerized to the backbone of propylene polymer material are methyl methacrylate and styrene.

10. (original): The process of claim 1 wherein the unsaturated aliphatic compound is selected from the group consisting of fatty oils, squalene, polybutadiene, and unsaturated aliphatic amine compounds.

11. (original): The process of claim 10 wherein the fatty oil is selected from the group consisting of (a) soybean oil, (b) safflower oil, and (c) linseed oil.

12. (original): The product produced by the process of claim 1.

13. (original): A composition comprising (1) a polymer selected from the group consisting of (a) polymers of vinyl-substituted aromatic compounds, (b) polymers of acrylic esters selected from the group consisting of (i) an ester of an acrylic acid substituted at the alpha-carbon atom by a 1-3 C alkyl group, and (ii) a combination of (i) and at least one monomer capable of being polymerized by free radicals, and (c) graft copolymers comprising a backbone of a propylene polymer material having graft polymerized thereto a monomer selected from the group consisting of (i) an ester of an acrylic acid substituted at the alpha-carbon atom by a 1-3 C alkyl group, and (ii) a combination of (i) and at least one monomer capable of being polymerized by free radicals, and (2) about 0.1% to about 5%, based on the weight of the polymer, of at least one aliphatic compound having at least one site of unsaturation, the compound having a molecular weight of at least 200 and an iodine number of at least 10.

14. (canceled).

15. (original): The composition of claim 13 wherein the vinyl-substituted aromatic compound is selected from the group consisting of (a) styrene, (b) alpha-methylstyrene, and (c) ring-substituted styrenes.

16. (original): The composition of claim 13 wherein the polymer of an acrylic ester is poly(methyl methacrylate).

17. (original): The composition of claim 13 wherein the propylene polymer material backbone of the graft copolymer is selected from the group consisting of:

(a) a crystalline homopolymer of propylene having an isotactic index greater than 80;

(b) a crystalline copolymer of propylene and an olefin selected from the group consisting of ethylene and 4-10 C alpha-olefins, provided that when the olefin is ethylene, the maximum polymerized ethylene content is 10% by weight, and when the olefin is a 4-10 C alpha-olefin, the maximum polymerized content thereof is 20%, the copolymer having an isotactic index greater than 85;

(c) a crystalline terpolymer of propylene and two olefins selected from the group consisting of ethylene and 4-8 C alpha-olefins, provided that the maximum polymerized 4-8 C alpha-olefin content is 20% by weight, and, when ethylene is one of the olefins, the maximum polymerized ethylene content is 5% by weight, the terpolymer having an isotactic index greater than 85;

(d) an olefin polymer composition comprising:

(i) about 10% to about 60% by weight of a crystalline propylene homopolymer having an isotactic index greater than 80, or a crystalline copolymer of monomers selected from the group consisting of (a) propylene and ethylene, (b) propylene, ethylene and a 4-8 C alpha-olefin, and (c) propylene and a 4-8 C alpha-olefin, the copolymer having a polymerized propylene content of more than 85% by weight, and an isotactic index greater than 85;

(ii) about 5% to about 25% of a copolymer of ethylene and propylene or a 4-8 C alpha-olefin that is insoluble in xylene at ambient temperature, and

(iii) about 30% to about 70% of an elastomeric copolymer of monomers selected from the group consisting of (a) ethylene and propylene, (b) ethylene, propylene, and a 4-8 C alpha-olefin, and (c) ethylene and a 4-8 C alpha-olefin, the copolymer optionally containing about 0.5% to about 10% of

a diene, and containing less than 70% by weight of polymerized ethylene and being soluble in xylene at ambient temperature, and having an intrinsic viscosity of about 1.5 to about 4.0 dl/g,

wherein the total amount of (ii) and (iii), based on the total olefin polymer composition, is about 50% to about 90%, the weight ratio of (ii)/(iii) is less than 0.4, and the composition is prepared by polymerization in at least two stages, and has a flexural modulus of less than 150 MPa; and

(e) a thermoplastic olefin comprising:

(i) about 10% to about 60% of a crystalline propylene homopolymer having an isotactic index greater than 80, or a crystalline copolymer of monomers selected from the group consisting of (a) ethylene and propylene, (b) ethylene, propylene, and a 4-8 C alpha-olefin, and (c) ethylene and a 4-8 C alpha-olefin, the copolymer having a polymerized propylene content greater than 85% and an isotactic index of greater than 85;

(ii) about 20% to about 60% of an amorphous copolymer of monomers selected from the group consisting of (a) ethylene and propylene, (b) ethylene, propylene, and a 4-8 C alpha-olefin, and (c) ethylene and a 4-8 C alpha-olefin, the copolymer optionally containing about 0.5% to about 10% of a diene and containing less than 70% polymerized ethylene and being soluble in xylene at ambient temperature; and

(iii) about 3% to about 40% of a copolymer of ethylene and propylene or a 4-8 C alpha-olefin that is insoluble in xylene at ambient temperature,

wherein the composition has a flexural modulus of greater than 150 but less than 1200 MPa.

18. (original): The composition of claim 17 wherein the propylene polymer material is a propylene homopolymer.

19. (original): The composition of claim 13 wherein the monomers graft polymerized to the backbone of propylene polymer material are methyl methacrylate and methyl acrylate.

20. (original): The composition of claim 13 wherein the monomers graft polymerized to the backbone of propylene polymer material are methyl methacrylate and methacrylic acid.

21. (original): The composition of claim 13 wherein the monomers graft polymerized to the backbone of propylene polymer material are methyl methacrylate and styrene.

22. (original): The composition of claim 13 wherein the unsaturated aliphatic compound is selected from the group consisting of fatty oils, squalene, polybutadiene, and unsaturated aliphatic amine compounds.

23. (original): The composition of claim 22 wherein the fatty oil is selected from the group consisting of (a) soybean oil, (b) safflower oil, and (c) linseed oil.

24. (original): The composition of claim 13 which further comprises from about 2% to about 30%, based on the total weight of the composition, of one or more rubber components selected from the group consisting of (a) an olefin copolymer rubber, (b) a monoalkenyl aromatic hydrocarbon-conjugated diene block copolymer, and (c) a core-shell rubber.

25. (original): The composition of claim 13 which further comprises from about 5% to about 90%, based on the total weight of the composition, of a broad molecular weight distribution propylene polymer material having a M_w/M_n of about 5 to about 60 and a melt flow rate of about 0.5 to about 50 g/10 min.

26. (original): The composition of claim 24 which further comprises from about 5% to about 90%, based on the total weight of the composition, of a broad molecular weight distribution propylene polymer material having a M_w/M_n of about 5 to about 60 and a melt flow rate of about 0.5 to about 50 g/10 min.